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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,471	10/30/2001	Chhandomay Mandal	P6066	1329
45774	7590	02/23/2005	EXAMINER	
KUDIRKA & JOBSE, LLP ONE STATE STREET, SUITE 800 BOSTON, MA 02109			HOANG, PHUONG N	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/021,471	<b>Applicant(s)</b> MANDAL ET AL.	
	<b>Examiner</b> Phuong N. Hoang	<b>Art Unit</b> 2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1- 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 – 26 are pending for examination.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3, 6 – 9, 11, 14 – 17, and 19 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas “Enterprise JavaBeans Technology Server Component Model for the Java Platform” pages 1 – 24 in view of Clark, US patent no. 6,442,541.**

4. Thomas and Clark references were cited in the last office action.
5. **As to claim 1**, Thomas teaches a method for managing a data service from a management terminal in a distributed computer system having a host computer system with a lookup service and at least one storage device connected to the host computer system by driver software, the method comprising the steps of:
  - (b) running, in the host, a federated bean that exports an interface (Enterprise Java defines a set of Java APIs that provide access to existing infrastructure services,

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pages 3 – 4 on Enterprise Java Platform section and page 14) containing methods that generate commands to the management facade (Enterprise JavaBeans Container, page 14);

(c) using the lookup service (name and directory services, pages 3 – 4 on Enterprise Java Platform section and page 15 section Naming and directory services) to obtain a proxy (EJB object, page 3 section Enterprise Java Platform and page 14 on Illustration 2 and page 15 section EJB object) to the federated bean; and

(d) in response to commands received from the management terminal (client, page 14 on Illustration 2), using the proxy to make method calls (method calls, page 14 on Illustration 2) on the federated bean interface.

Thomas does not explicitly teach the step of the management façade software that receives data from the driver software and the storage device and control how that data passes between the driver software and the storage device and to retrieve data service attributes in order to manage the data service.

Clark teaches the step of the step of the management façade software (driver manager, col. 2 lines 8 – 20, lines 61 – 65, and col. 3 lines 1 – 50) that receives data from the driver software and the storage device and control how that data passes between the driver software and the storage device and to retrieve data service attributes (connecting Java beans to the database storage through the JDBC driver and retrieve data, abstract and col. 1 and col. 5 lines 50 – col. 6 line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas and Clark's system because

Clark's management façade software would provide a control connection between drivers and database storage to provide the services requested from the client terminal with the Enterprise JavaBeans technology.

6. **As to claim 3**, Thomas teaches the step of wherein step (d) comprises using a graphical user interface (GUI, page 8 section Granularity) in the management terminal to generate the commands.

7. **As to claim 6**, Thomas teaches a large-scale, distributed computer system comprising many servers (page 1) which can be implemented as many host as needed for the step of wherein the distributed computer system comprises a plurality of host computer systems each having at least one storage device connected to the each host computer system by driver software and step (a) comprises running in each of the plurality of hosts, management facade software that controls data passing between the driver software and the storage device in the each host and that retrieves attributes of the data service; and step (b) comprises running, in each host, a federated bean that exports an interface containing methods that generate commands to the management facade in the each host.

8. **As to claims 7 and 8**, Thomas teaches the step of wherein step (c) comprises using the lookup service to obtain a first proxy (first EJB object for first bean, page 14) to a first federated bean in one host computer system and using the first proxy to control

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the first federated bean retrieve a second proxy of a second federated bean running in a second host (it is the relationship between data).

9. **As to claim 9**, it is the apparatus claim of claim 1. See rejection for claim 1 above.

10. **As to claim 11**, see rejection for claim 3 above.

11. **As to claims 14 - 16**, see rejection for claims 6 - 8 above.

12. **As to claim 17**, it is the product claim of claim 1. See rejection for claim 1 above.

13. **As to claim 19**, see rejection for claim 3 above.

14. **As to claims 20 - 22**, see rejection for claims 6 - 8 above.

15. **As to claim 23**, it is the apparatus claim of claim 1. See rejection for claim 1 above.

16. **As to claims 24 - 26**, see rejection for claims 6 - 8 above.

17. **Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas "Enterprise JavaBeans Technology Server Component Model for the Java Platform" pages 1 – 24 in view of Clark, US patent no. 6,442,541, and further in view of Glass, US patent no. 6,629,128.**

18. Glass reference was cited in the last office action.

19. **As to claim 2**, Thomas and Clark do not explicitly teach the step of wherein step (d) comprises using a command line interface in the management terminal to generate the commands.

Glass teaches that the client try to access to Beans using a command line interface in the management terminal to generate the commands (command line, col. 19 lines 10 – 15 and fig. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas, Clark, and Glass's system because Glass's command line would enable the client terminal to access to the Beans objects.

20. **As to claims 10 and 18**, see rejection for claim 2 above.

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21. **Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas "Enterprise JavaBeans Technology Server Component Model for the Java Platform" pages 1 – 24 in view of Clark, US patent no. 6,442,541, and further in view of McBrearty, US patent no. 5,794,013.**

22. McBrearty reference was cited in the last office action.

23. **As to claim 4**, Thomas and Clark do not explicitly teach the step of wherein step (a) comprises inserting a SCSI terminal emulation interface layer between the driver software and the storage device, which interface layer makes the storage device appear as a SCSI device.

McBrearty teaches the step of a SCSI terminal emulation (device emulator, figures 1 and 2) interface layer between the driver software and the storage device (remote storage, fig. 2), which interface layer makes the storage device appear as a SCSI device (it is the capability of the emulator).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Thomas, Clark, and McBrearty's system because McBrearty's SCSI terminal emulator would emulate a storage device to look like the SCSI device to adapt with a different environment.

24. **As to claim 12**, see rejection for claim 4 above.



**25. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas “Enterprise JavaBeans Technology Server Component Model for the Java Platform” pages 1 – 24 in view of Clark, US patent no. 6,442,541, and further in view of Gostanian, US patent no. 5,781,910.**

**26. As to claim 5,** Thomas modified by Clark teaches the step of a storage volume interface layer (driver manager, col. 2 lines 8 – 20, lines 61 – 65, and col. 3 lines 1 – 50).

Thomas and Clark do not teach the steps of additional data service interface layer.

Gostanian teaches the steps of additional data service interface layer (642 of fig. 6 and col. 18 lines 35 – 50).

It would have been obvious to one of ordinary skill in the art at the time the invention to modify the Thomas’s, Clark’s, and Gostanian’s systems because Gostanian’s data service interface layer would provide a specific driver that translates the connectivity calls to be understandable by the storage device.

**27. As to claim 13,** see rejection for claim 5 above.

***Response to Arguments***

28. Applicant's arguments filed 11/22/04 have been fully considered but they are not persuasive.

29. Applicant's arguments have been considered but the reference prior art clearly read on the amended limitation as set forth in the rejection above. The claim rejection contained mapping of how prior art equivalent read-on the claimed limitation. Hence, applicant's remark are not persuasive as the amendment failed to distinguish over the prior art of record.

***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Child, US patent no. 6,556,995, demonstrating a method to retrieve from a database via ODBC.

Goldberg, US patent no. 6,434,543, demonstrating a method for caching of database connections in a distributed application.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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